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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,142	08/14/2006	Malcolm Mainland Sinclair	36290-0427-00-US (229830)	6816
23973	7590	02/17/2009	EXAMINER	
DRINKER BIDDLE & REATH ATTN: INTELLECTUAL PROPERTY GROUP ONE LOGAN SQUARE 18TH AND CHERRY STREETS PHILADELPHIA, PA 19103-6996			ANDLER, MICHAEL S	
			ART UNIT	PAPER NUMBER
			2876	
			MAIL DATE	DELIVERY MODE
			02/17/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/589,142	<b>Applicant(s)</b> SINCLAIR ET AL.	
	<b>Examiner</b> Michael Andler	<b>Art Unit</b> 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 16-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>14 August 2006, 5 February 2007, 22 May 2008</u> .            | 6) <input type="checkbox"/> Other: _____                          |



## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

a) Claims **31-36**, drawn to an apparatus, and related method claims **16-17 and 20-30** are rejected under 35 U.S.C. 102(e) as being anticipated by Walker (US 6,979,827).

Regarding claims **16-17, 20-30, and 31-36**, Walker discloses:

an object (Fig 4, item 12: *media*) or a plurality of objects comprising paper manufactured with identification elements (Col 2, lines 25-28), the object comprising a primary identifier in the form of a plurality of identification elements embedded in the object (Fig 2, item 14: *authentication fibers*),

the identification elements being detectable when illuminated by electromagnetic radiation selected from the group consisting of infrared and ultraviolet, but being indistinguishable from the rest of the object when illuminated with visible light (Col 3, lines 35-36)

the identification elements being randomly distributed so that the positions of the identification elements are unique to the object (Col 2, lines 32-33), and

the object further comprising:

a reference point in the form of a printed symbol (Fig 4, item 16: *authentication indicia* and Col 3, lines 48-51),

the detector comprising:

a source of electromagnetic radiation selected from the group consisting of infrared and ultraviolet (Col 3, lines 31-32);

a camera (Fig 3, item 28: *sensor*);

image analysis equipment for converting an image made by the camera into code (Fig 8, item 54: *fiber detector* and item 56: *indicia detector*);

a database into which the code can be recorded and from which codes relating to other recorded camera images can be retrieved (See Fig 8, item 52: *controller* and Col 7, lines 1-4, where it is understood that the controller would have some type of storage in order to compare bar code data and serial numbers); and

processing equipment adapted to compare the code relating to the object being verified and measured information relating to the positions with the other codes already stored in the database relating to recorded camera images (See Col 7, lines 1-7 and Col 3, lines 11-15, where it is understood that a sensor would have some type of analog threshold value (measured information) in order to detect the presence of *authentication fibers in the media 12*);

wherein the detector is adapted to identify a sub-area of the object defined by the reference point (See Fig 4, items 14 and 16 in different areas of the *media 12*) and to record information relating to the positions of the identification elements in the sub-area

relative to the reference point (See Col 6, lines 29-35 and Col 7, lines 1-2 where the bar code or serial number is the related recorded information);

wherein the detector is adapted to detect the location of the reference point on the object and to direct the camera to this part of the object and the image analysis equipment to a corresponding part of the image (Col 6, lines 35-38);

wherein the image analysis equipment is adapted to divide the camera image into a plurality of sub-regions and to count the number of pixels illuminated in each sub-region to produce code corresponding to the camera image (See Col 3, lines 11-15, where it is understood that the sensor would include a means of determining the number of illuminated pixels, such as a minimum threshold value (tolerance level), in order to detect the presence of the authentication fibers); and

wherein the detector is adapted to recognise and record information relating to a unique secondary identifier (See Fig 4, item 16 and Col 4, lines 22-26, where a printed bar code or serial number is both a reference point and an identifier), and the processing equipment is adapted to compare the code relating to the object to be verified only to codes relating to recorded objects that have the same secondary identifier (See Col 7, lines 1-4).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

a) Claims **18-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker (US 6,979,827) in view of Smith (US 7,035,428).

Regarding claims **18-19**, Walker discloses all the limitations of claim **16** and wherein the object to be verified contains a reference point (Fig 4, item 16: *authentication indicia*).

Walker suggests that the positions of the reference point and the associated identification elements (Fig 4, item 14: *authentication fibers*) are co-located with portions of an object (See Fig 4, item 12: *media* and the co-located *fibers 14* and *indicia 14*). Walker also suggests a system for locating authentication fibers and authentication indicia within the object (Fig 12) and performing a comparison of indicia information unique to the object (Fig 11, step 240).

Smith suggests a system for locating authentication fibers (Col 6, lines 24-26) co-located with a reference point (Fig 2, items 22 and 24: *dots*) and comparing the authentication fibers in a portion of an object (Fig 2, item 29: *portion*) with those stored in a database (Col 8, lines 49-52 and Col 11, lines 13-15).

Walker does not specifically teach measuring the positions of identification elements in the object to be verified relative to the reference point.

Smith discloses measuring the positions of identification elements in the object to be verified relative to a reference point (See Fig 2 and Col 9, lines 29-37).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to image and compare the positions of a portion of fibers identified by a printed reference point in a paper document, in order to determine the authenticity of the

Art Unit: 2876

document “based upon random, intrinsic physical characteristics of the workpiece, thereby reducing or eliminating the need to perform database queries of identifying information to make such determinations” (Smith, Col 4, lines 24-27).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Andler whose telephone number is (571) 270-5385. The examiner can normally be reached on Monday-Friday 7:30 AM to 3:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Michael Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Andler/  
Examiner, Art Unit 2876

/Michael G Lee/  
Supervisory Patent Examiner, Art Unit 2876